U.S. Ser. No. 10/604,971 Attorney Docket No. 1046_032 Response To 4/13/06 Office Action

Page 2 of 22

This listing of claims replaces all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

1. (Previously Presented) A robotic data storage library with soft power capability, the library

comprising: a plurality of storage locations, each capable of holding at least one data storage

element; a data transfer interface for receiving said data storage element and establishing a

communication path with said data storage element so that data can be transferred between

the data storage element and a host computer; a transport unit for moving said data storage

element between one of said plurality of storage locations and said data transfer interface; a

power supply for providing power to a component of the library; a power switch switchable

between an ON state and an OFF state; and a power controller for monitoring said power

switch for a transition between said ON state and said OFF state and after detecting said

transition of said power switch between said ON state and said OFF state, controlling power

applied to said component.

2. (Previously Presented) The library, as claimed in claim 1, wherein: said power controller

comprises means for terminating the application of power to said component after a fixed

amount of time has expired since detecting said transition of said power switch from said ON

state to said OFF state.

3. (Previously Presented) The library, as claimed in claim 1, wherein: said power controller

comprises means for terminating the application of power to said component after a variable

amount of time has expired since detecting said transition of said power switch from said ON

state to said OFF state.

4. (Canceled)

5. (Previously Presented) The library, as claimed in claim 1, wherein: said power controller

comprises means for sequencing a power output of said power supply with a second power

2

U.S. Ser. No. 10/604,971 Attorney Docket No. 1046_032 Response To 4/13/06 Office Action Page 3 of 22

output of a second power supply.

- 6. (Previously Presented) The library, as claimed in claim 1, wherein: said power supply comprises a power input interface for receiving power from a power source and a power output interface for providing power to components of the library.
- 7. (Previously Presented) The library, as claimed in claim 1, wherein: said power switch comprises a user interface that allows an individual to transition said power switch between said ON state and said OFF state.
- 8. (Previously Presented) The library, as claimed in claim 1, wherein: said power switch comprises an interface that allows an external device to transition said power switch between said ON state and said OFF state.
- 9. (Previously Presented) The library, as claimed in claim 8, wherein: said interface comprises a host computer interface that allows a said host computer to transition said power switch between said ON state and said OFF state.
- 10. (Previously Presented) The library, as claimed in claim 8, wherein: said interface comprises an uninterruptible power supply interface that allows an uninterruptible power supply to transition said power switch from said ON state to said OFF state.
- 11. (Previously Presented) A robotic data storage library with soft power capability, the library comprising: a plurality of storage locations, each capable of holding at least one data storage element; a data transfer interface for receiving a data storage element and establishing a communication path with said data storage element so that data can be transferred between the data storage element and a host computer; a transport unit for moving said data storage element between one of said plurality of storage locations and said data transfer interface; a power supply for providing power to a component of the library; a power switch switchable between an ON state and an OFF state; a power controller for monitoring said power switch for a transition from said OFF state to said ON state and, after detecting said transition of said

U.S. Ser. No. 10/604,971

Attorney Docket No. 1046_032

Response To 4/13/06 Office Action

Page 4 of 22

power switch from said OFF state to said ON state, delaying power applied to said

component for a period of time after detection of said transition of said power switch from

said OFF state to said ON state.

12. (Previously Presented) The library, as claimed in claim 11, wherein: said power supply

comprises a first power supply comprising a first power output for providing power to said

component of the library and a second power supply comprising a second power output for

providing power to a second component of the library.

13. (Previously Presented) The library, as claimed in claim 12, wherein: said power controller

is adapted to sequentially enable said first power output of said power supply and said second

power output of said second power supply to provide power to said component and said

second component after detecting said transition of said power switch from said OFF state to

said ON state.

14. (Previously Presented) The library, as claimed in claim 13, wherein: said first power

output of said first power supply and said second power output of said second power supply

are electrically connected to a common bus for providing power to said component and said

second component.

15. (Currently Amended) The library, as claimed in claim 11, wherein said component is not

associated with a second power supply wherein: said-power controller is adapted to cause a

delay in the application of power to said component after detecting said transition of said

power-switch from said OFF state to said ON state until after applying power to a second

component.

16. (Previously Presented) The library, as claimed in claim 11, wherein: said power controller

is adapted to cause a delay in the application of power to said component by controlling an

output of said power supply.

17. (Previously Presented) The library, as claimed in claim 11, wherein: said power controller

4

U.S. Ser. No. 10/604,971 Attorney Docket No. 1046_032 Response To 4/13/06 Office Action Page 5 of 22

is adapted to cause said delay in the application of power to said component by communicating with said component via a network.

- 18. (Previously Presented) A robotic data storage library with soft power capability, the library comprising: a plurality of storage locations, each capable of holding at least one data storage element; a data transfer interface for receiving said data storage element and establishing a communication path with said data storage element so that data can be transferred between the data storage element and a host computer; a transport unit for moving said data storage element between one of said plurality of storage locations and said data transfer interface; a power supply for providing power to a component of the library; a power switch switchable between an ON state and an OFF state; a power controller for monitoring said power switch for a transition from said ON state to said OFF state and after detecting said transition of said power switch from said ON state to said OFF state, issuing a power termination message to said component concerning termination of power applied to said component.
- 19. (Previously Presented) The library, as claimed in claim 18, wherein: said power controller comprises means for terminating the application of power to said component after a fixed amount of time has expired since issuing said power termination message to said component.
- 20. (Previously Presented) The library, as claimed in claim 18, wherein: said power controller comprises means for terminating the application of power to said component after a variable amount of time has expired since issuing said power termination message to said component.
- 21. (Previously Presented) The library, as claimed in claim 20, wherein: said means for terminating comprises means for changing said variable amount of time from a first value to a second value that is greater than said first value if a request for an extension of time is received from said component before expiration of said variable amount of time when said variable amount of time has said first value.
- 22. (Previously Presented) The library, as claimed in claim 21, wherein: said means for

U.S. Ser. No. 10/604,971

Attorney Docket No. 1046_032

Response To 4/13/06 Office Action

Page 6 of 22

terminating comprises means for issuing a revised power termination message to said

component indicating a change in said variable time from said first value to said second

value.

23. (Previously Presented) The library, as claimed in claim 18, wherein: said power supply

provides power to said power controller independent of supplying power to said components.

24. (Previously Presented) The library, as claimed in claim 18, wherein: said power controller

comprises non-volatile data storage for storing a boot-strap program.

25. (Previously Presented) The library, as claimed in claim 18, wherein: said power controller

comprises a network for communicating with said component.

26. (Previously Presented) The library, as claimed in claim 25, wherein: said network

comprises a Control Area Network.

27. (Previously Presented) The library, as claimed in claim 25, wherein: said network

comprises an Inter Integrated Circuit network.

28. (Previously Presented) The library, as claimed in claim 18, wherein: said power controller

comprises means for monitoring the power output by said power supply.

29. (Previously Presented) The library, as claimed in claim 18, further comprising: a second

plurality of storage locations for storing additional data storage elements; a second drive; a

second power supply for providing power to a second component of the library; and a slave

power controller for receiving a master-slave message from said power controller, wherein

said slave power controller controls power applied to said second component of the library

after receiving said master-slave message from said power controller.

30. (Previously Presented) The library, as claimed in claim 29, wherein said master-slave

message comprises said termination message.

6

U.S. Ser. No. 10/604,971 Attorney Docket No. 1046_032 Response To 4/13/06 Office Action Page 7 of 22

- 31. (Previously Presented) A method for providing soft power capability in a robotic data storage library comprising: providing a data storage library comprising a plurality of storage locations, each capable of holding at least one data storage element, a data transfer interface for receiving a data storage element and establishing a communication path with said data storage element so that data can be transferred between the data storage element and a host computer, a transport unit for moving said data storage element between one of said plurality of storage locations and said data transfer interface, a power supply for providing power to a component of the library, and a power switch switchable between an ON state and an OFF state; monitoring said power switch for a transition between said ON state and said OFF state; and controlling power applied to said component after detecting said transition between said ON state and said OFF state.
- 32. (New) The library, as claimed in claim 1, wherein: said component is said transport unit.